



Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/437,726		
		Filing Date	November 9, 1999		
		First Named Inventor	Willem P. C. Stemmer		
		Group Art Unit	1643 163Y		
		Examiner Name	Unassigned		
		Attorney Docket Number	02-029220US		

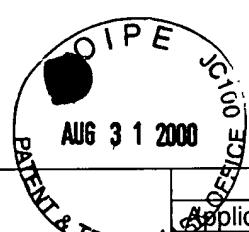
U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			
<i>B11</i>	AA	5,270,170		Affymax Technologies N.V.	12-14-1993	
<i>B1f</i>	AB	5,358,665		PPG Industries, Inc.	10-25-1994	

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
<i>B11</i>	AC	WO	96/33207		Glaxo Group Limited	10-24-1996		
	AD	WO	95/22625		Affymax Technologies N.V.	08-24-1995		
<i>B1f</i>	AE	WO	86/03776		Hernalsteens et al.	07-03-1986		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					T
<i>B11</i>	AF	<u>CHANG et al.</u> , (1999) "Evolution of a cytokine using DNA family shuffling" <i>Nature Biotechnology</i> 17:793-797					
	AG	<u>CHRISTIANS et al.</u> , (1999) "Directed evolution of thymidine kinase for AZT phosphorylation using DNA family shuffling" <i>Nature Biotechnology</i> 17:259-264					
	AH	<u>CRAMERI and STEMMER</u> , (1995) "Combinatorial multiple cassette mutagenesis creates all the permutations of mutant and wildtype cassettes" <i>BioTechniques</i> 18:194-195					
	AI	<u>CRAMERI ET AL.</u> , 1996. "Construction and evolution of antibody-phage libraries by DNA shuffling." Pg. 100-102.					
	AJ	<u>CRAMERI ET AL.</u> , 1996. "Improved Green Fluorescent Protein by Molecular Evolution Using DNA Shuffling." <i>Nature Biotechnology</i> . Vol.14 : Pg.315-319.					
	AK	<u>CRAMERI ET AL.</u> , 1997. "Molecular evolution of an arsenate detoxification pathway by DNA shuffling." <i>Nature Biotechnology</i> . Vol. 15: Pg. 436-438.					
	AL	<u>FALCONE and TABITA</u> , (1993) "Complementation Analysis and Regulation of CO ² Fixation Gene Expression in a Ribulose 1,5-Bisphosphate Carboxylase-Oxygenase Deletion Strain of <i>Rhodospirillum rubrum</i> ." <i>J. Bact.</i> 175:5066					
	AM	<u>FALCONE et al.</u> , (1991) "Expression of Endogenous and Foreign Ribulose 1,5-Bisphosphate Carboxylase-Oxygenase(RubisCO) Genes in a RubisCO Deletion Mutant of <i>Rhodobacter sphaeroides</i> ." <i>J. Bact.</i> 173:2099					
	AN	<u>FALCONE et al.</u> , (1998) "Transporation Mutagenesis and Physiological Analysis of Strains Containing Inactive Form I and Form II Ribulose Biophosphate Carboxylase/Oxygenase Genes in <i>Rhodobacter sphaeroides</i> ." <i>J. Bact.</i> 170:5					
<i>B1f</i>	AO	<u>GATES ET AL.</u> , 1995. "Affinity Selective Isolation of Ligands from Peptide Libraries Through Display on a lac Repressor 'Headpiece Dimer.'" <i>J. Mol. Biol.</i> Pg. 1-14					

Examiner Signature	<i>B. L. Sison</i>	Date Considered	1-25-03
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



31812aw

FF 7

(Modified) PTO/SB/08A-B (10-96)
Approved for use through 10/31/99. OMB 0651-0031

Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/437,726
		Filing Date	November 9, 1999
		First Named Inventor	Willem P. C. Stemmer
		Group Art Unit	1643-1634
		Examiner Name	Unassigned
		Attorney Docket Number	02-029220US

<i>B28</i>	AP	MINSHULL and STEMMER (1999) "Protein evolution by molecular breeding" <i>Current Opinion in Chem. Biol.</i> 3:284-290	
	AQ	NESS et al., (1999) "DNA shuffling of subgenomic sequences of subtilisin" <i>Nature Biotechnology</i> 17:893-896	
	AR	O'NEILL et al. (1993) <i>The Plant Journal</i> 3: 729	
	AS	PATTEN et al., (1997) "Applications of DNA shuffling to pharmaceuticals and vaccines" <i>Current Opinion in Biotech.</i> 8:724-733	
	AT	STEMMER ET AL., 1995. "Single-step assembly of a gene and entire plasmid from large numbers of oligodeoxynucleotides." Vol. 164: Pg. 49-53.	
	AU	STEMMER, "Sexual PCR and Assembly PCR." Pg. 447-458	
	AV	STEMMER, 1994. "DNA shuffling by random fragmentation and reassembly: <i>In vitro</i> recombination for molecular evolution." <i>Proc. Natl. Acad. Sci. USA.</i> Vol. 91: Pg. 10747-10751	
	AW	STEMMER, 1994. "Rapid evolution of a protein <i>in vitro</i> by DNA shuffling." <i>Nature.</i> Vol. 370 No. 4: Pg. 389-391.	
	AX	STEMMER, 1995. "Searching Sequence Space." <i>Bio/Technology.</i> Vol. 13: Pg. 549-553.	
	AY	STEMMER, 1995. "The Evolution of Molecular Computation." Vol. 270: Pg. 1510	
	AZ	STMMER et al., (1999) "Molecular breeding of viruses for targeting and other clinical properties" <i>Tumor Targeting</i> 4:1-4	
<i>B28</i>	BA	ZHANG ET AL., 1997. "Directed evolution of a fucosidase from a galactosidase by DNA shuffling and screening." <i>Proc. Natl. Acad. Sci. USA.</i> Vol. 94: Pg. 4504-4509.	

Examiner Signature	<i>B.L. Larson</i>	Date Considered	1-25-03
--------------------	--------------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.